

Use of multiparametric analysis of meteor showers for their parental bodies' genetic parameters determination

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Abstract

© Published under licence by IOP Publishing Ltd. In this paper, the possibility of multiparametric analysis application for studying genetic connections between meteor showers and their parental bodies is considered. The modern methods of determining such connections take into account some parameters of parental bodies, such as size, orbital elements, and chemical composition. Obviously, all of these parameters refer to different physical substances. In this regard, simultaneous estimation of the impact of those parameters may be carried out with a given probability using regression analysis. The aim of this work is to develop a method of robust estimation of genetic parameters and use it for asteroid and meteor genetic connections analysis.

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